Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Waste Management of Virginia, Inc.

Facility Name: Maplewood Recycling & Disposal Facility
Facility Location: 20221 Maplewood Road
Jetersville, Virginia 23870
Registration Number: 30993
Permit Number: 51-007-0010

January 1, 2004
Effective Date

December 31, 2008
Expiration Date

_____
Director, Department of Environmental Quality

November 29, 2003
Signature Date

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I. Facility Information

Permittee
Waste Management of Virginia, Inc.
P.O. Box 168
Amelia, Virginia 23002

Responsible Official
Mr. Lee Wilson
Director of Landfill Operations

Facility
Maplewood Recycling and Disposal Facility
20221 Maplewood Road
Jetersville, Virginia 23870

Contact Person
D. Richard Guidry
Area Compliance Director
(804) 966-8711

AIRS Identification Number: 51-007-0010

Facility Description: SIC Code 4953 - Municipal solid waste (MSW) and industrial waste is disposed in sanitary landfill cells; decomposing waste produces landfill gas; all waste is placed in the same cells.

II. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation (9 VAC_)	Pollutant Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
6	Services and consumer use of janitorial prods.	5-80-720 A		
11	Tobacco smoking rooms and areas	5-80-720 A		
33	QA/QC and inspection equipment, including samplers	5-80-720 A		
A1	Gas flares or flares to indicate danger	5-80-720 A		
A2	Comfort air conditioning & ventilation (process exception)	5-80-720 A		
A3	Portable heaters, movable by hand	5-80-720 A		
A4	Office activities, such as typewriters, printers & pens	5-80-720 A		
A5	Interior maintenance activities, but not cleaning prod. eq.	5-80-720 A		
A6	Architectural maintenance and repair (but not construction)	5-80-720 A		
A7	Exterior maintenance to care for grounds	5-80-720 A		
A8	Bathroom and locker room venting and maintenance	5-80-720 A		
A9	Copying and duplication activities for internal use	5-80-720 A		
A10	Blueprint copiers and auxiliary photographic processes	5-80-720 A		
A11	Space heaters operating by direct heat or radiant trans	5-80-720 A		
A12	Safety devices	5-80-720 A		
A14	Brazing, soldering, welding auxiliary to principal equip	5-80-720 A		
A15	Vehicle engine, incl. any motor vehicle or constr. equip	5-80-720 A		
A16	Fire fighting equipment	5-80-720 A		
A20	Dumpster	5-80-720 A		
A23	Parts washer (water-based)	5-80-720 A		
A24	Refueling diesel-powered vehicles, incl. diesel tanks	5-80-720 A		
A28	Maintenance activities such as hand-held maintenance eq.	5-80-720 A		
A36	Water tanks	5-80-720 A		
A38	Process raw water treatment	5-80-720 A		
A40	Spill collection tanks	5-80-720 A		
A41	Steam vents and leaks from boilers and steam dist. sys.	5-80-720 A		
A44	Nonhazardous boiler cleaning solutions	5-80-720 A		
A45	Portable or mobile containers	5-80-720 A		
A46	Vents for transformer vaults, elec. motors, deaerators	5-80-720 A		
A47	Vents or stacks for sewer lines	5-80-720 A		
A48	Pump seals	5-80-720 A		
A51	Storage of substances in closed drums, barrels or bottles	5-80-720 A		
A54	Equipment used for preparing food for onsite consumption	5-80-720 A		

Emission Unit No.	Emission Unit Description	Citation (9 VAC_)	Pollutant Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
A56	Parking lot resurfacing	5-80-720 A		
A57	Relief valves, excl. air pollution equip. bypass valves	5-80-720 A		
P002	Fuel oil storage tank	5-80-720 C		10,000 gallons
P003	Fuel oil storage tank	5-80-720 C		550 gallons
	Gas Flares or Flares to indicate danger	5-80-720 A		
P004	Gasoline storage tank	5-80-720 C		1,000 gallons

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

III. Significant Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
P01		Municipal Solid Waste Landfill, Solid Waste Permit No. 540	43 million yd^3 with a maximum compaction of 1700 lbs/yd^3	Parnel Biogas Utility Flare	CF-1	NMOC, HAPs	January 28, 2003
P002	CF-1	Landfill Gas (LFG) Collection and Control System, including wells, header pipes, a centrifugal blower system and Parnel Biogas Utility Flare	3000 scfm	n/a	n/a	n/a	January 28, 2003
LT1, LT2	n/a	two leachate storage tanks	250,000 gallons each	n/a	n/a	n/a	

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

IV. Process Equipment Requirements – Landfill Operations and LFG Collection and Control System (unit ID# P01 and P002)

A. Limitations

As used in this section, all terms shall have the meaning as defined in 40 CFR 60.2, 40 CFR 60.18, and 40 CFR 60.751 (Subparts A and WWW). A copy of sections of 40 CFR Part 60 Subpart A and 40 CFR Part 60 Subpart WWW are attached.

1. **NSPS Subpart WWW** - The municipal solid waste landfill, as well as the landfill gas collection and control system, shall be constructed and operated in accordance with 40 CFR 60 Subpart WWW. The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

(9 VAC 5-50-410, 40 CFR 60.750 through 40 CFR 60.759, and Condition 11 of January 28, 2003 Permit)

2. **Design Capacity** - The design capacity of the MSW landfill which includes Phases 1 through 34 is 43,000,000 yd^3 with a maximum compaction of 1700 lbs/yd^3. A change in the design capacity may require a State Air Pollution Control Board permit to construct and operate.

(9 VAC 5-50-390 and Condition 3 of the January 28, 2003 Permit)

3. **The Gas Collection and Control System (GCCS)** - The permittee shall operate an active collection and control system, approved by the Department that captures the gas generated within the landfill. The GCCS installed shall be certified under 40 CFR 60.752 (b)(2)(ii)(A). The active collection system shall be designed and operated to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment. The system shall collect gas at a sufficient extraction rate to meet all operational requirements of this permit and 40 CFR 60 Subpart WWW. The system shall be designed to minimize the off-site migration of subsurface gas by installation of liners meeting the requirements listed in 40 CFR 258.40. The maximum expected gas flow rate shall be recalculated and the LFG system redesigned to handle the maximum expected gas flow rate from the entire area of the landfill whenever cells, in addition to those listed for Phases 1 through 34, are proposed for landfill expansion. The permittee shall submit an updated design plan for the GCCS whenever changes or additions are made to the system.

(9 VAC 5-50-410, 40 CFR 60.752 (b)(2)(ii)(A), 40 CFR 60.759(c) and Condition 4 of the January 28, 2003 Permit)

4. **Specifications for Active Collection System** - The permittee shall site and construct the vertical extraction wells and header piping system in the following manner as proposed in the revised active gas collection and control system design plan dated July 2000 and any revised design plan approved by the DEQ:

a. The vertical gas wells shall be installed a maximum distance as determined in the revised active gas collection and control system design plan approved by the DEQ in leachate recirculation areas, currently proposed for Phases 1, 2, 3, and 4, and a maximum of 400 feet in all other areas. Each vertical gas well shall be installed to a depth within 10 feet to top of the bottom liner and consist of a borehole 36 inches in diameter. Each vertical gas well casing shall consist entirely of minimum 6 inch diameter high density polyethylene (HDPE), polyvinyl chloride (PVC) or other equivalent pipe material. The lower, screened portion of each vertical gas well shall start at about –14.0 feet and shall be constructed of perforated HDPE pipe (minimum 8-inches long, minimum 3/8-inch wide slots at 45E) surrounded by an aggregate gravel pack extending two feet above the uppermost slots. The upper portion of each vertical gas well shall be solid-wall HDPE, PVC, or other equivalent material with two 24-inch bentonite plugs enclosing a ten-foot section of torpedo sand. The two sections of each vertical gas well shall be separated by a piece of one-sided geonet composite.

b. Each vertical gas extraction well shall be connected by sub-headers and laterals to the main landfill gas collection header running along the perimeter of the waste mass. All header, sub-header, and lateral piping shall be constructed of SDR 17 HDPE pipe or equivalent material.

c. All landfill gas piping shall be designed to slope to low points where condensate can be collected and handled. All piping within the limits of waste shall be designed at a minimum two (2) percent slope, allowing for the impacts of settlement on the pipe grades. The main landfill gas header outside the limits of waste shall be sloped at a minimum of 0.5 percent. At each low point, the condensate shall drop out into a eight-foot dual containment condensate sump containing a pneumatic pump with level controls. Condensate shall be pumped through a dual containment force main into the main facility leachate collection system when sufficient condensate collects in the sump.

d. A 36-inch diameter, 60-inch high "knock-out" tank shall be located immediately prior to the blowers on the blower/flare station. The tank shall remove the majority of any remaining moisture from the landfill gas in order to protect the blowers and flare from corrosive condensate.

e. The active collection system shall be in operation a minimum of 15 years.

f. The permanent gas monitoring probes currently installed around the perimeter of the site shall be used to monitor for lateral gas migration.

g. Only segregated areas of asbestos or nondegradable material shall be excluded from the gas collection and control system provided that documentation is submitted detailing the nature, date of deposition, location, and amount of asbestos or nondegradable material deposited in the area(s). Nondegradable material shall be excluded from control provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the

nondegradable material shall be documented and submitted. A separate NMOC emissions estimate shall be made for each section proposed for exclusion and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. The separate NMOC emissions estimate shall be calculated using the procedures listed in 40 CFR 60.759(a)(3)(ii).

A change in the approved gas collection and control system design plan may require a permit to modify and operate including, but not limited to the following: if there is an emissions increase for open flare, CF-1, installation of control devices other than open flare, CF-1, or capacity increase of the gas collection and control system. Regardless of the change, the permittee shall submit for approval a revised gas collection and control system design plan if the change was not in the most recent active gas collection and control system design plan as approved by the DEQ.

(9 VAC 5-50-410, 40 CFR 60.759 and Condition 9 of the January 23, 2003 Permit)

5. **NMOC Controls** - The collection system shall be operated such that all collected gas is routed to the control system where it is combusted by a non-assisted type open flare (CF-1) **OR** to a treatment system that processes the collected gas for subsequent sale or use as described in 40 CFR 60.752(b)(2)(iii)(C). The open flare (CF-1) shall be operated with a flame present at all times collected gas is routed to it. Any emissions from any atmospheric vent from the gas treatment system shall be routed to the control system and combusted by the open flare. The treatment system must produce pipeline quality gas if the facility desires to meet the requirements of 40 CFR 60.752(b)(iii)(C) with a device other than energy recovery. Open flare CF-1 shall meet the design and operational criteria in 40 CFR 60.18. The net heating value for the landfill gas being combusted shall be 200 BTU/SCF or greater as determined by methods listed in 40 CFR 60.18(f)(3) or other methods approved by the Administrator. The exit velocity shall be less than 60 FT/SEC except when the net heating value for the landfill gas is greater than 1,000 BTU/SCF **OR** the exit velocity is less than V_{MAX} and less than 400 FT/SEC. The exit velocity shall be determined using the applicable methods listed in 40 CFR 60.18(f)(4) and 40 CFR 60.18(f)(5) or methods approved by the Administrator. A change in the control system may require a permit to modify and operate.

(9 VAC 5-50-410, 40 CRF 60.18(e), 40 CFR 60.752 (b)(2)(iii), 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(e) and Conditions 4, 5 and 12 of the January 28, 2003 Permit)

6. **GCCS Operation** - The permittee shall operate the collection and control system such that:

   a. Each well or design component shall be placed as specified in the approved GCCS design plan and shall be installed no later than 60 days after the date on which the initial solid waste has been in place in any cell or group of cells for a period of :

      (1) 5 years or more if active; or

      (2) 2 years or more if closed or at final grade;

   b. Each wellhead is at negative pressure except as provided in 40 CFR 60.753(b);

c. Each interior wellhead is at a temperature less than 55°C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The nitrogen and oxygen levels shall be determined according to 40 CFR 60.753(c). The permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

d. The methane concentration is less than 500 ppmv above background at the surface of the landfill.

(9 VAC 5-50-410, 40 CFR 60.752 (b)(2)(ii)(A)(2), 40 CFR 60.755(b), 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(b), (c) and (d), and Condition 4(b), (d), (e), and (i) of the January 28, 2003 Permit)

7. **Operational Integrity and GCCS Shut down** - The permittee shall operate the control or treatment system at all times when the collected gas is routed to the system. The permittee shall operate the GCCS such that in the event that the collection and control system is inoperable, the GCCS gas moving equipment shall be shut down and all vents to the atmosphere shall be closed within 1 hour.

(9 VAC 5-50-410, 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(e), 40 CFR 60.753(f) and Condition 12 of the January 28, 2003 Permit)

8. **Open Flare Requirements -** The Parnel Biogas Utility Flare (CF-1) shall operate within the following parameters to ensure that the vendor guaranteed emission factors for carbon monoxide (0.15 lb/MMBTU) and nitrogen oxides as NO_2 (0.04 lb/MMBTU) are met:

   a. A landfill gas flow rate from 300 SCFM (minimum) to 3,000 SCFM (maximum).

   b. A heat input of 98.3 MMBTU/hr which shall be demonstrated using the procedures listed in Condition IV.C.5.c

   c. A methane concentration in the landfill gas from 40% (minimum) to 60%(maximum).

(9 VAC 5-50-260 and Condition 6 of the January 28, 2003 Permit)

9. **Approved Fuels** - The approved fuel for the Parnel Biogas Utility Flare (CF-1) is landfill gas. The flare may also use propane gas to ignite the pilot flame in the flare. A change in fuel may require a permit to modify and operate.

(9 VAC 5-80-1180, 9 VAC 5-50-390 and Condition 13 of the January 28, 2003 Permit)

10. **Throughput Limit** - The Parnel Biogas Utility Flare (CF-1) shall consume no more than 1,576,800,000 cubic feet of landfill gas per year, calculated monthly as the sum of each consecutive 12 month period.

(9 VAC 5-80-1180 and Condition 14 of the January 28, 2003 Permit)

11. **Open Flare Emissions** – Emissions from the operation of the Parnel Biogas Utility Flare (CF-1) shall not exceed the limits specified below:

Particulate Matter/PM_{10}	1.8 lbs/hr	8.0 tons/year
Sulfur Dioxide	1.5 lbs/hr	6.6 tons/year
Nitrogen Oxides	3.9 lbs/hr	17.2 tons/year
Carbon Monoxide	14.8 lbs/hr	64.6 tons/year
Non-Methane Organic Compounds	2.1 lbs/hr	9.2 tons/year
Volatile Organic Compounds	1.8 lbs/hr	7.8 tons/year

(9 VAC 5-50-260 and Condition 16 of January 28, 2003 Permit)

12. **Visible Emission Limit** – There shall be no visible emissions from the open flare except for periods not to exceed a total of 5 minutes during any 2 consecutive hours as determined by 40 CFR 60 Appendix A Method 22.

(9 VAC 5-50-260, 9 VAC 5-50-410, 40 CFR 60.18, and Condition 15 of the January 28, 2003 Permit)

13. **Maintenance/Operating Procedures -** At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

    b. Maintain an inventory of spare parts.

    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

    d. Train operators in the proper operation of all such equipment and familiarize the operators with written operating procedures. The permittee shall maintain records of training provided including the names of the trainees, the date of training and the nature of the training.

All records required by this condition shall be kept at the facility for a five year period and made available for inspection by the DEQ.
(9 VAC 5-50-20 E and Condition 37 of the January 28, 2003 Permit)

B. Monitoring

1. **Well Pressure** - The permittee shall measure gauge pressure in the header at each individual active well monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days. If a negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the system shall be expanded within 120 days of the initial measurement of positive pressure. If corrective actions are taken as specified in 40 CFR 60.755(a)(3), the monitored exceedance is not a violation of the operational requirements in Condition IV.A.6.b. Exceptions to the requirement for corrective action are listed under 40 CFR 60.753(b)(1)-(b)(3).

(9 VAC 5-50-410, 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(g), 40 CFR 60.755(a)(3), 40 CFR 60.756(a)(1) and Conditions 20 and 22 of the January 28, 2003 Permit)

2. **Well Parameters -** The permittee shall monitor each active well monthly for temperature and nitrogen or oxygen as provided in 40 CFR 60.753(c) and Conditions IV.D.3 or IV.D.4. If a well exceeds one of the operating parameters stated in Condition IV.A.6.c.of this permit, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedence of other operational or performance standards. If corrective actions are taken as specified in 40 CFR 60.755(a)(5), the monitored exceedance is not a violation of the operational requirements in Condition IV.A.6.c.

(9 VAC 5-50-410, 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(g), 40 CFR 60.755(a)(5), 40 CFR 60.756(a)(2) and (3), and Conditions 20 and 22 of the January 28, 2003 Permit)

3. **Surface Monitoring -** The permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing), and where visual observations indicate elevated concentrations of landfill gas (such as distressed vegetation and cracks or seeps in the cover), for each collection area for which waste has been in place for 2 or more years if closed or at final grade or for which waste has been in place for 5 or more years if active. The permittee may establish an alternative traversing pattern that ensures equivalent coverage. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

(9 VAC 5-50-410, 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(d), 40 CFR 60.755(c)(1) through (c)(3) and Condition 20 of the January 28, 2003 Permit)

4. **Surface Monitoring Method of Operation** – The surface methane monitoring shall take place using an organic vapor analyzer, flame ionization detector or other portable monitor meeting the specifications provided in paragraph (d) of 40 CFR 60.755. The background concentration of methane during surface emissions monitoring shall be determined for the

instrument measuring the surface concentrations of methane by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. Surface emission monitoring shall be performed in accordance with 40 CFR 60 Appendix A, Method 21, Section 4.3.1, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. The portable analyzer used to determine the surface methane concentration shall meet the instrument specifications provided in 40 CFR 60, Appendix A, Method 21, Section 3, except that methane shall replace all references to VOC. The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air. To meet the performance evaluation requirements in section 3.1.3 of Method 21, the instrument evaluation procedures of Section 4.4 of Method 21, of Appendix A shall be used. The calibration procedures in Section 4.2 of Method 21 shall be followed immediately before commencing a surface monitoring survey.

(9 VAC 5-50-410, 40 CFR 60.752(b)(2)(iv) and 40 CFR 60.755(d))

5. **Exceedances** – Any reading of surface methane of 500 ppm or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements.

   a. The location of each monitored exceedance shall be marked and the location recorded along with the action taken to correct the exceedance.

   b. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

   c. If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in Condition IV.B.5.e. (40 CFR 60.755 (c)(4)(v)) shall be taken, and no further monitoring of that location is required until the action specified in Condition IV.B.5.e. (40 CFR 60.755 (c)(4)(v)) has been taken.

   d. Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in Condition IV.B.5.b. or c. (40 CFR 60.755(c)(4) (ii) or (iii)) shall be re-monitored 1 month from the initial exceedance. If the 1-month monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month monitoring shows an exceedance, the actions specified in Condition IV.B. 5. c. or e. (40 CFR 60.755(c)(4) (iii) or (v))shall be taken.

   e. For any location where the monitored methane concentration equals or exceeds 500 ppm above background 3 times within a quarterly period, a new well or other collection device

shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes, or control devices, and a corresponding timeline for installation may be submitted to the Administrator for approval.

(9 VAC 5-50-410, 40 CFR 60.752(b)(2)(iv), 40 CFR 60.753(g) 40 CFR 60.755(c)(4)(i) through 60.755(c)(4)(v) and Condition 25 of the January 28, 2003 Permit)

6. **Cover Integrity** - The permittee shall implement a program to monitor for cover integrity and accomplish cover repairs as necessary on a monthly basis.

(9 VAC 5-50-410, 40 CFR 60.752(b)(2)(iv) and 40 CFR 60.755(c)(5) and Condition 20 of the January 28, 2003 Permit)

7. **Sampling Ports** - The permittee shall install a sampling port and thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead.

(9 VAC 5-50-410, 40 CFR 60.752(b)(2)(iv) and 40 CFR 60.756(a))

8. **Monitoring Devices** - The GCCS shall be equipped with a gas flow rate-measuring device that shall record the flow to the open flare (CF-1) at least every 15 minutes. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with the manufacturer's specifications. Each monitoring device shall be in operation when the GCCS is operating.

(9 VAC 5-50-410, 9 VAC 5-50-20 C, 40 CFR 60.756(c) and Conditions 5 and 21 of the January 28, 2003 Permit)

9. **Flare Monitoring** - The permittee shall use a heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the flare's pilot light or the flame itself to monitor and record the continuous presence of a flame when emissions are vented to the open flare. The monitoring device shall be installed, maintained, calibrated and operated in accordance with the manufacturer's specifications. The methane concentration of the landfill gas feeding flare, CF-1, shall be monitored at least once every week when landfill gas is vented to the flares during the weekly timeframe. The monitoring may occur at the common header feeding the flare.

(40 CFR 60.18 (d), 40 CFR 60.752(b)(2)(iv), 40 CFR 60.756(c) and Conditions 5 and 20 of the January 28, 2003 Permit)

10. **Subsurface Monitoring** - The permanent gas monitoring probes currently installed around the perimeter of the site shall be monitored on a semi-annual basis for methane in percent (%) following the procedures listed in Solid Waste Permit # 540.

    (Condition 20 of the January 28, 2003 Permit)

C. Recordkeeping

1. The permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of:

a. the design capacity report which triggered 60.752(b);

b. the current amount of solid waste in-place; and,

c. the year-by-year waste acceptance rate.

Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

(9 VAC 5-50-410, 40 CFR 60.758(a) and Condition 25 of the January 28, 2003 Permit)

2. The permittee shall keep, for the life of the control equipment, up-to-date, readily accessible records of the following information, as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

   a. the maximum expected gas generation flow rate as calculated in Condition IV.D.1.a (40 CFR 60.755(a)(1)).

   b. the density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in Condition IV.D.1.b (40 CFR 60.759(a)(1)).

   c. the type of open flare (i.e. steam-assisted, air-assisted, or nonassisted) used, all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18.

   d. continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent

   (9 VAC 5-50-410 and 40 CFR 60.758(b))

3. The permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

   a. the permittee shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors .

   b. the permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided for in 60.759(a)(3)(ii).

   (9 VAC 5-50-410 and 40 CFR 60.758(d))

4. The permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. The permittee shall keep a copy of the most recent approved gas collection and control system design plan.

   (9 VAC 5-50-410 and 40 CFR 60.758(e))

5. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. The records required to demonstrate compliance with the permit shall include at a minimum:

   a. Current maximum design capacity.

   b. All decommissioned wells.

   c. The heat input for the open flare CF-1 calculated on a quarterly basis using the lower heating value of methane (911 BTU/SCF), the quarterly highest monitored methane concentration recorded for item l and the corresponding gas flow during this quarterly highest monitored methane concentration.

   d. The flare pilot flame or flare flame continuous monitoring in the flare stack for open flare CF-1 when landfill gas is being vented to the flare.

   e. All periods of operations when landfill gas is being vented to the open flare CF-1 during which the pilot flame or flare flame is absent for the open flare.

   f. The monthly monitored gauge pressure, temperature, and nitrogen or oxygen concentration for each well.

   g. The results from the monthly cover integrity monitoring and the date of cover repair.

   h. The quarterly monitored methane concentration at the landfill surface.

   i. The semi-annual monitored permanent gas monitoring probes for methane in percent (%) currently installed around the perimeter of the site.

   j. The weekly monitored methane concentration of the landfill gas feeding flare CF-1 during the weekly timeframe when landfill gas is being vented to the flare. The monitoring may occur at the common header feeding the flare.

   k. The landfill gas flow, recorded at least once every 15 minutes for the open flare CF-1.

   l. Any inoperable periods exceeding 1 hour for the collection or control system as described in Condition IV.A.7. when landfill gas is being vented to it.

m. The yearly throughput of landfill gas to the open flare CF-1 calculated monthly as the sum of each consecutive 12 month period.

n. Emissions calculations for open flare CF-1.

o. Date of first waste placement for Phases 1 through 34.

p. Calculations detailing the estimated annual site specific density and maximum design capacity.

q. A copy of the most recent approved gas collection and control system design plan.

All records required by this condition and by Subpart WWW shall be available (readily accessible) for inspection by the DEQ and shall be kept current for the most recent five years. (9 VAC 5-50-50, 9 VAC 5-50-410, 40 CFR 60.758(c), and Condition 25 of the January 28, 2003 Permit)

6. The permittee shall record and maintain a log of well inspections that indicated a positive pressure had existed, including instances when positive pressure occurred in efforts to avoid fire, and any corrective action taken to meet the negative pressure requirement of Condition IV.A.6. of this permit.
   (9 VAC 5-50-410, 40 CFR 60.753(b)(1) and Condition 25 of the January 28, 2003 Permit)

7. The permittee shall develop and maintain a surface monitoring design plan that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals.
   (9 VAC 5-50-410, 40 CFR 60.753(d) and Condition 25 of the January 28, 2003 Permit)

8. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the landfill gas collection and control system, any malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative.
   (9 VAC 5-50-410 and 40 CFR 60.7(b))

9. A copy of the January 28, 2003 Permit shall be maintained on the premises of the facility to which it applies.
   (Condition 41 of the January 28, 2003 Permit)

D. Testing/Compliance Provisions

1. **Gas Collection System** - The following specified methods in 40 CFR 60.755 shall be used to determine whether the gas collection system is in compliance with 40 CFR 60.752(b)(2)(ii) and operated as specified in Conditions IV.A.3 and IV.A.6. and 40 CFR 60.573(b) and (c).

   a. For the purposes of calculating the maximum expected gas generation flow rate from the

landfill to determine compliance with Condition IV.A.3 and 40 CFR 60(b)(2)(ii)(A)(*1*), the following equation shall be used:

For sites with known year-to-year solid waste acceptance rate:

$$Q_M = \sum_{i=1}^{n} 2kL_oM_i(e^{-kt_i})$$

where Q_M = maximum expected gas generation flow rate
k = methane generation rate constant, year $^{-1}$
L_o = methane generation potential, cubic meters/megagram solid waste
M_i = mass of solid waste in the i^{th} section, megagrams
t_i = age of the i^{th} section, years

b. For the purposes of determining sufficient density of gas collectors for compliance with Condition IV.A.3. and 40 CFR 60.752 (b)(2)(ii)(A)(*2*), the permittee shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

c. For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR 60.752 (b)(2)(ii)(A)(*3*) and Conditions IV.A.3. and IV.A.6.b., the permittee shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under 40 CFR 60.753(b). If a negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of the positive pressure. Any attempted corrective measure shall not cause the exceedances of other operations or performance standards.

d. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the permittee shall install sampling ports/temperature ports at wellheads and monitor each well monthly for temperature and nitrogen or oxygen as required 40 CFR60.753 (c) and Condition IV.A 6. c. If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection and system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards.

(9 VAC 5-50-410, 40 CFR 60.755(a), and Condition 8 of the January 28, 2003 Permit)

2. **NMOC Concentration and LFG Flow Rate** - After the installation of the gas collection and control system in compliance with 40 CFR 60.755, the permittee shall determine the actual

NMOC concentration and LFG flow rate and shall calculate the NMOC emission rate in accordance with 40 CFR 60.754 (b) for reporting the uncontrolled NMOC emission rate. (Condition 18 of January 28, 2003 Permit)

3. **Nitrogen Testing** – Unless oxygen is tested, the nitrogen level at each wellhead shall be determined by using Method 3C.
(9 VAC 5-50-410, 40 CFR 60.753(c)(1) and Condition 8 of January 28, 2003 Permit)

4. **Oxygen Testing** – Unless nitrogen is tested, the oxygen level at each wellhead shall be determined by an oxygen meter using Method 3A or 3C, except for the following:

   a. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span.

   b. A data recorder is not required.

   c. Only a zero and a span calibration gas are required. Ambient air may be used as span.

   d. A calibration error check is not required.

   e. The allowable sample bias, zero drift, and calibration drift are +/- 10%.

   (9 VAC 5-50-410, 40 CFR 60.753(c)(2) and Condition 8 of January 28, 2003 Permit)

E. Reporting

1. Annual compliance reports shall contain the following:

   a. Value and length of time for exceedance of applicable parameters monitored as required in Conditions IV.B.1., IV.B.2, and IV.B.9. including:

      (1) gas header pressure;

      (2) nitrogen or oxygen concentration;

      (3) each interior wellhead temperature; and

      (4) the heat sensing device at the flare (CF-1).

   b. Description and duration of all periods when the gas stream is diverted from the flare (CF-1);

   c. Description and duration of all periods when the open flare (CF-1) was not operating for a period exceeding 1 hour during periods when landfill gas was being routed to the flare and length of time the flare was not operating;

d. All periods when the collection system was not in operation for a period in excess of 5 days;

e. The location of each exceedance of the 500 parts per million surface methane concentration limit (Condition IV.A.6.d.), and the concentration recorded at each location for which an exceedance was recorded in the previous month;

f. The date of installation and the location of each well or collection system expansion added pursuant to Conditions IV.B.1, IV.B.2, IV.B.5.or IV.D.1.; and,

g. Description and duration of all instances when positive pressure occurs in efforts to avoid a fire per 40 CFR 60.753(b)(1).

Annual reports shall cover each calendar year period and shall be submitted to DEQ prior to March 31 of the following calendar year. One copy of the annual compliance report shall be submitted to the US EPA at the following address:

Associate Director
Office of Air Enforcement (3AP10)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-50-410, 40 CFR 60.753(b)(1), 40 CFR 60.757(f) and Condition 26 of the January 28, 2003 Permit)

2. The permittee shall furnish written notification to the Director, Piedmont Regional Office of any modifications to the gas collection and control system design plan that was submitted July 2000 and any subsequent plans approved by the Piedmont Regional Office at least 90 days prior to such date. Modification examples include, but are not limited to: installing control devices other than open flare CF-1, changes in the treatment system that processes the collected gas for subsequent sale or use or installation of blowers other than those attached to open flare CF-1.

(9 VAC 5-50-50, Condition 31(e) of the January 28, 2003 Permit)

3. The permittee shall submit the closure report to DEQ and the Administrator within 30 days of waste acceptance cessation. DEQ may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 9 VAC 20-80-250 E & F and 40 CFR 258.60. If a closure report has been submitted to the DEQ, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CRR 60.7(a)(4).

(9 VAC 5-50-410 and 40 CFR 60.757(d))

V. Liquid Storage Tanks (Emission Unit ID: LT1 and LT2)

A. Recordkeeping

The owner of each storage vessel as specified in 40 CFR 60.110b(a) shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept for the life of the vessel. This condition is applicable to the leachate storage tanks.
(9 VAC 5-50-410 and 40 CFR 60, Subpart Kb)

VI. Facility Wide Conditions

A. Limitations

1. Dust from grading, cell construction, waste compaction, application of daily cover, wood waste chipping operations, storage piles and traffic areas shall be controlled by wet suppression or equivalent (as approved by the DEQ) control measures.

(Condition 7 of the January 28, 2003 Permit)

2. Unless otherwise specified in this permit, no owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 30% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section.

(9 VAC 5-50-80)

VII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
9 VAC 5-40-5800	Emission Standards for Municipal Solid Waste Landfills	existing landfills

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

VIII. Future Applicable Requirements

A. National Emissions Standards for Hazardous Air Pollutants (Municipal Solid Waste Landfills):

The Landfill 'MACT' (40 CFR 63 Subpart AAAA), published January 16, 2003, includes the following additional requirements for affected MSW landfills.

1. Those affected sources defined as 'existing landfills' shall be in compliance with the specific items included in 40 CFR Part 63, Subpart AAAA by January 16, 2004.

2. A "Startup, shutdown and malfunction" (SSM) Plan shall be developed and implemented for the facility. (40 CFR 63.6(e)(3) and 40 CFR 63.1960)

3. Annual reports of the operation of the GCCS, as required by the NSPS, Subpart 60.757(f), will be required semi-annually beginning with the first report after the compliance date of January 16, 2004. (40 CFR 63.1980)

4. Semiannual reports required by 40 CFR 63, Subpart AAAA, with respect to the SSM plan should include the following events:

   a. Each SSM event and a description of how thorough the facility complied with each item contained in the SSM Plan.

   b. Inconsistent actions taken by the facility during an SSM event must be recorded within two working days of the event and a letter must be submitted to the Administrator within seven days of the event. Any new actions that are indicated as appropriate during an SSM event shall be incorporated in a new SSM Plan.

(40 CFR 63.1930 through 63.1990)

IX. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable. (9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.

3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Right of Entry

The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

1. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;

2. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;

3. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and

4. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.
(9 VAC 5-170-130, Condition 33 of January 28, 2003 Permit)

D. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

   a. The date, place as defined in the permit, and time of sampling or measurements.

   b. The date(s) analyses were performed.

   c. The company or entity that performed the analyses.

   d. The analytical techniques or methods used.

   e. The results of such analyses.

   f. The operating conditions existing at the time of sampling or measurement.

   (9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
   (9 VAC 5-80-110 F)

3. The permittee shall report the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

   a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31. The first report shall cover the time period of the effective date of the permit through the end of the semiannual period it begins in.

   b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

      (1) Exceedance of emissions limitations or operational restrictions;

      (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

      (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

E. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to DEQ and EPA no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31. The first report shall cover the time period of the effective date of the permit through the end of the calendar year.

2. The identification of each term or condition of the permit that is the basis of the certification.

3. The compliance status.

4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-110 K.5)

F. Permit Deviation Reporting

The permittee shall notify the Director of Piedmont Regional office within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken,

and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3. of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

G. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Piedmont Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Regional Office.
(9 VAC 5-20-180 C)

H. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

I. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)

J. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)

K. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)

L. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

M. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

N. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

O. Fugitive Dust Emission Standards

1. During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

   a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

   b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

P. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-50-20 E and 9 VAC 5-20-180 G)

Q. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
(9 VAC 5-80-110 J)

R. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

S. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

T. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E)

U. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.

   (9 VAC 5-80-160)

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.

   (9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the

change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

V. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

   a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

   b. The permitted facility was at the time being properly operated.

   c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

   d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

W. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The

Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C and 9 VAC 5-80-260)

X. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)

Y. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.

2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

CC. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

1. 9 VAC 5 Chapter 50, Part II, Article 2: Standards of Performance for Odorous Emissions

2. 9 VAC Chapter 50, Part II, Article 3: Standards of Performance for Toxic Pollutants

(9 VAC 5-80-110 N and 9 VAC 5-80-300)